Pedal Power
ACT Inc.

Submission to the Inquiry into the Immigration Bridge Australia Proposal

Pedal Power ACT Inc., with over 2,400 members, promotes cycling for transport and recreation, with the aim of getting "more Canberrans cycling more often for a better community".

We prepare many submissions on ACT construction projects, new developments and the like, and have considerable expertise in showing how cycling can be incorporated into projects. Although we are a bicycle organisation, we also take a strong interest in walking as a form of transport, as cycling and walking are complementary forms of sustainable transport.

Cycling is an important part of the solution to many urban problems. These include greenhouse gas emissions, pollution, traffic congestion, parking shortages, liveability issues and health problems such as obesity, diabetes and cardiovascular diseases. For this reason we have an interest in any issue relevant to cycling.

Many of the controversial issues surrounding the Immigration Bridge proposal are unrelated to cycling or transport, so we make no comment on them. Our submission focuses on the Immigration Bridge's potential to improve cycling and walking conditions in Canberra. From this perspective, Pedal Power is supportive of the Immigration Bridge proposal provided the bridge:

- incorporates suitable ramps
- is of a suitable width
- enables people to ride without having to dismount.

Funding and Priority

Pedal Power's understanding is that any funding for the Immigration Bridge, whether from private or public sources, would be specifically for this project and not available for other purposes. This being the case, it is not relevant to discuss whether Pedal Power regards the Immigration Bridge as a funding priority from a cycling perspective.

However, any capital infrastructure (whether it be a road, path, bridge or something else, and whether it be on a priority cycle route or not) should always be planned and built to cater for cycling. Almost any infrastructure project has the capacity to encourage and facilitate more cycling if properly designed, with the resulting community benefits mentioned above. By being built to cater for additional users (bicycle riders), it provides maximum benefit for cost to a greater number of citizens.

GPO Box 581 Canberra ACT 2601
Phone: 02 6248 7995 Fax: 02 6248 7774
E-mail: pedalpower@pedalpower.org.au Web: www.pedalpower.org.au

Our, and everyone else's, experience with infrastructure generally is that it costs very little more to make it cycle friendly when built, whereas retrofitting to cater for cycling at a later date is prohibitively expensive. This view is generally accepted by government, and underlies, for example, Roads ACT's policy of incorporating bicycle lanes into any new arterial road construction.

On this basis, the Immigration Bridge must be designed to cater for cycling, and failure to do so would greatly diminish its use and value to the community.

The need to build the Immigration Bridge as a Cycle Route

All publicity to date has described the Immigration Bridge as a 'pedestrian bridge'. It took considerable effort by Pedal Power to obtain assurances from Immigration Bridge Australia (IBA) that bicycles would even be permitted to use the bridge. To date there is little evidence that bicycle riders will be welcomed users. For example, IBA chairman Andrew Baulch suggested as recently as May 2008 that bicycle riders would preferably have to dismount[1].

Pedal Power's regular representations to IBA since 2006 have highlighted how the Immigration Bridge will carry significant cycle traffic and should be designed accordingly.

Each year, we conduct peak hour counts of cyclists entering and leaving the Civic/Acton (ANU) area[2]. This research shows that during peak commuting hours, Commonwealth Avenue Bridge carries nearly a quarter of all cycle traffic entering this area - around 385 bicycle riders per hour, or about one every 6 seconds. Given that the ANU is Canberra's biggest individual cycling destination, and that the Immigration Bridge would become the shortest route option for many journeys (see below), we estimate that as many as a quarter to a third of existing riders using Commonwealth Avenue Bridge ie around 90-130 riders per hour are likely to change to the Immigration Bridge if it is constructed and if it facilitates cycling.

In addition, the rate of cycling in Canberra is growing. We know that from the same data, peak hour cycling in Civic/ANU has increased 48% from 2004 to 2008. The same count in 2009[3] showed another increase, despite the economic downturn and lower petrol prices, indicating an underlying continuing growth in cycling.

The construction of the bridge itself is likely to increase cycling . For a large number of cycling origins and destinations, the Immigration Bridge would provide a shorter route than is currently available using existing lakeside paths and Commonwealth Avenue Bridge. This is especially the case for:

- People riding from Belconnen and some parts of North Canberra to the Parliamentary Triangle and most of South Canberra
- South Canberra residents riding to the Australian National University Campus, CSIRO and related precincts, and Belconnen.

[1] http://www.aph.gov.au/hansard/joint/commttee/J10771.pdf
[2] Full details are on the Pedal Power Website at pedalpower.org.au
[3] Only a few weeks ago and not yet published

These riders would save approximately 1.75km per trip[4], or 3.5km per round journey, or if commuting on a typical five day working week, approximately 17.5 km per week. A rider with a 8-10km journey to work (for example from Red Hill to parts of the ANU campus, or Cook to Parliament House via main off-road paths) would save around 20% of their journey time. For potential beginner commuters, shortening a regular route by this amount can make the difference between riding or not (the same argument applies equally to people who might walk or run to work). This is likely to encourage people who have previously not cycled to take it up.

Taking all these factors into account, it is not unreasonable to suggest that the Immigration Bridge could be carrying up to 200 bicycles per hour in peak commuting periods within a decade. Cycling levels are likely to be much less at other times of day when sightseers would use the bridge.

It is also likely that the additional bridge would encourage additional recreational cycling and walking, particularly by creating a 'round West Basin route' as well as by adding additional permutations to potential rides and walks; for example, many people who currently ride or walk around the Central Basin for leisure might extend this to include the West Basin. Note that this does not apply only to Canberra residents; many Australians visiting Canberra bring bicycles or hire them, and given the tourist attracting qualities of both the National Museum and the Immigration Bridge itself, many of them will ride on the Bridge.

We consider it is highly unlikely that groups of high speed training riders, who tend to use arterial roads rather than paths, would use the Immigration Bridge.

Design Aspects

Pedal Power's major concern (based on the limited information available) is that the bridge may have steps at either end instead of ramps. This would drastically reduce its value as a cycling route (and may result in it being useless to bicycle riders), and thus result in loss of the community benefits mentioned above through increased cycling. For riders who still chose to use it, having to carry a bicycle up and down steps would be inconvenient and would inevitably lead to serious accidents, possibly involving non-riders. Even if lifts were provided, they would not be able to keep up with the number of bicycle riders needing to use them. They would also consume massive amounts of electricity, negating the value of the proposed solar panel roof.

Accordingly, we consider it absolutely essential that the bridge has ramps at either end, with the shallowest possible inclinations – for ease of climbing and safety when descending. If space at the bridge ends is limited, then spiral ramps would be acceptable. We acknowledge that catering for bridge users (such as wheelchair users, bicycle riders and walkers) and sailors creates design conflicts, but we believe these can be managed with careful ramp design that keeps gradients to a minimum while allowing sufficient clearance beneath the bridge for boat masts.

[4] This calculation is made comparing distances between the roundabout outside the National Museum and the south end of Commonwealth Avenue Bridge, using the lakeside paths and the Commonwealth and Immigration Bridges.

While the ramps are our biggest concern, it is also important that the bridge be of sufficient width to cope with the expected cycling and pedestrian traffic volumes with minimum user conflict.

A large number of other technical design considerations are relevant in ensuring the bridge is properly built for cycling. In particular it is important that it adhere to the relevant standards which deal with all these issues. These standards are:

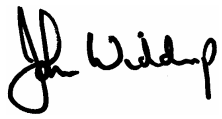
- *Austroads Guide to Traffic Engineering Practice Part 14, Bicycles*, (which include maximum gradients for the ramps mentioned above) and
- *ACT Government Design Standards for Urban Infrastructure, Part 13, Pedestrian and Cycle Facilities.*

Other submissions have raised the issue of wind gusts affecting bicycle riders. However our long observation and experience from Commonwealth and Kings Avenue Bridges is that gusts of this severity are rare, and occur only in extreme weather conditions when very few people are likely to be on the bridge. Sufficiently high railings will prevent any mishaps.

Finally, no unreasonable restrictions, such as a requirement to dismount, or unrealistic speed limits, should be imposed.

Summary

Leaving aside issues that do not directly concern cycling and walking, and acknowledging that the Immigration Bridge would be funded separately from usual sources, Pedal Power is supportive of the Immigration Bridge proposal provided that it is built to suitably accommodate bicycle riders and pedestrians and thus increase cycling and walking and provide considerable community benefit. However this benefit can only fully be realised if the bridge is designed and built as a cycling facility in addition to its purpose as a monument.



John Widdup,
President,
Pedal Power ACT Inc.
Phone 02 6161 1943